

codex alimentarius commission



FOOD AND AGRICULTURE
ORGANIZATION
OF THE UNITED NATIONS

WORLD
HEALTH
ORGANIZATION



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Agenda Item 4

**CX/FH 00/4 Add.1
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JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON FOOD HYGIENE

Thirty-third Session

Washington DC, U.S.A., 23 –28 October 2000

PROPOSED DRAFT CODE OF HYGIENIC PRACTICE FOR THE PRIMARY PRODUCTION, HARVESTING AND PACKAGING OF FRESH FRUITS AND VEGETABLES (AT STEP 3)

In response to CX/FH 00/4, the following Governments submitted comments: Brazil, Denmark, Poland, Mexico and the United States of America.

General Comments

Brazil

Brazil would like to congratulate the Drafting Group for the excellent work.

Denmark

In the document the use of disinfectants in water for food contact is mentioned in para. 5.2.2.1. Here, chlorine is often used as an example of a disinfectant. The disinfectant is used in order to obtain an effect on the microflora on the surface of the foodstuff.

In the written comments from Denmark to the circular letter from last year and during the meeting last year, we commented, that Denmark finds that the intentions of the use of chemicals like for example chlorine in the water for rinsing vegetables are to obtain an effect on the food itself, and therefore the use is not as disinfectants but as a function falling under the definition of food additives. However, at the last meeting some of the other delegations did not agree in this interpretation. In order to ensure that food safety relating to residues of chemical compounds also are dealt with, we propose that CCFH through CCFAC ask for a toxicological evaluation of the use of chlorine in direct contact with foodstuffs by JECFA as a first step. Furthermore we propose, that CCFH asks the CCFAC for advise on the interpretation on whether such use of chemical substance are covered by the definition on food additives or not.

Chlorine is often discussed in this context. It is well known from chlorination of drinking water that several reaction products are formed during the chlorination. In theory, the number of various reaction products and possibly also the concentrations could be higher in water containing for instance soil and juices from the foodstuffs. Furthermore, it is known that many of these reaction products can be of concern for the consumer safety. This is the background for Denmark being concerned about the use of chlorination of water, and especially of recycled or reused water.

Poland

In reference to liquid disinfection, we think that it should be registered what kind of preparations could be used. We propose to use only those preparations that can easily be rinsed out.

United States of America

The United States appreciates the work of Canada and its drafting partners in undertaking the revision to this Code. The Code is well developed and technically sound. The United States recommends the advancement of this Code to Step 5 of the Codex Step procedure.

The United States notes that the Working Group recommended that the title of the Proposed Draft Code should be changed to “*Proposed Draft Code of Hygienic Practice for the Primary Production and Packing of Fresh Fruits and Vegetables*”. The United States supports this recommendation.

INTRODUCTION

Mexico

We suggest removing the next to last line of the sentence: “...foods associated with the...” and incorporate the word “contaminated” after fresh vegetables, with the paragraph reading as follows: “...20 years. Nevertheless, the recent rise in reports of foodborne illnesses associated with contaminated fresh fruits and vegetables has raised...”.

2.1 SCOPE

Mexico

Second paragraph (Spanish version), we suggest changing the article “a” //”to”// to “para” //”for”//, resulting in the following: “The Proposed Annex ... are specific for primary production...”.

2.2 USE

Mexico

First paragraph, 6th sentence (Spanish version): we suggest changing to word “presentar” //”present”// to “tratan” //”deal with”// and “a: //”to”” // to “para” //”for”//, resulting in the following text: “In other sections... dealing with specific points for production...”.

We suggest eliminating the last sentence of first paragraph of the text: "The Draft Annex...and the production of sprouts for human consumption "., since it repeats what is said in section 2.1.

At the end of the second paragraph, we suggest incorporating the phrase "de los agricultores" // “of the growers” //, resulting in the following: "...Therefore, the...an awareness of the growers in the production...”.

United States of America

Second paragraph: We recommend the addition of the following sentence at the end of this paragraph:

"From primary production to be point of consumption, the products covered by this Code should be subject to a combination of control measures, and these control measures should be shown to achieve the appropriate level of public health protection."

2.3 DEFINITIONS

Mexico

In the first paragraph of definitions, we suggest substituting the word "los términos" //"terms"// for "expresiones" //"expressions"//.

Given that the current definition of "Biosolids" technically refers to the term "slurry", we suggest the following definition:

"Biosolids, sludge from residual water treatment plants, that due to their nutrient contents and their own characteristics or those acquired later in a stabilization process, may be subject to being used for the production of fresh fruits and vegetables".

In the definition for "cultivation", we suggest it be defined as "cultivating".

We suggest changing the text for "manure" to the following: "A fermented mixture of animal excrement and residues".

In terms of the definition for microorganisms, we suggest eliminating the sentence "when used as an adjective, the term "microbial" is used".

We suggest the following definition for Primary Production: "The steps involved in the growing and harvesting of fresh fruits and vegetables; such as the planting, transplanting, irrigation, application of agricultural chemicals and manure."

We suggest defining the term "antibiotics", since it is mentioned in the first bullet of point 3.2.1.7.

United States of America

Manure: This definition is too limiting. We suggest that the definition for manure should read: "Manure- Animal excrement which may be mixed with litter or other material, and which may be fermented or otherwise treated."

Definitions of Water:

Denmark

In the definition for clean water the square bracket around "or chemicals" should be deleted.

United States of America

The United States questions whether there is a need for a definition for reused irrigation water and recycled water.

3.1 ENVIRONMENTAL HYGIENE

Brazil

Fourth Paragraph, Last sentence, instead of “Domestic and wild animal should be excluded, as far as possible, from fresh...” (last sentence, 4th para. of 3.1), this new wording: “Considering this potential contamination source, efforts must be done to protect fresh product growing areas from animals. As far as possible, domestic and wild animal should be avoided in these areas.”

Denmark

We recognize that “domestic and wild animals should be excluded, as far as possible, from fresh produce growing areas during the growing and harvesting season”. In our terminology wild animals include not only e.g. foxes and deer but also all kind of birds and rodents. However, in reality it is difficult to keep wild animals away from outdoor growing areas unless extreme methods are applied.

Mexico

Second paragraph, first bullet (Spanish version), we suggest changing the word “arrastrados” //carried// to “acarreados” //”carried”//.

3.2.1 *Agricultural input requirements*

Denmark

The word “adversely” should be deleted or replaced by “significantly”.

3.2.1.1 Water for primary production

Brazil

In order to dedicate a topic for Water, Brazil suggest to reorder item 3.2.1.1. as “Water for primary production”, including 3.2.1.1.1 as “Water for irrigation and harvesting”; 3.2.1.1.2 as “Water for fertilizers...” and 3.2.1.1.3 as “Hydroponic water”. “Manure, biosolids and other natural fertilizers” should be 3.2.1.2 .

Mexico

In point 3.2.1.1 in the last sentence, we suggest changing the word “treated” to “residual”.

3.2.1.2 Water for irrigation and harvesting

Denmark

Water used for products in the last two categories (bullet 2 and 3) should be of drinking water quality.

Mexico

We suggest that in the table of contents, points 3.2.1.2 to 3.2.1.14 be part of number 3.2.1.1.

3.2.1.3 Water for fertilizers, pest control and other agricultural chemicals

3.2.1.4 Hydroponic water

3.2.1.5 Manure, biosolids and other natural fertilizers

Denmark

A text on areas where manure, biosolids and other natural fertilisers should not be used could be included.

United States of America

The United States recommends that, as this Code proceeds through revision, that a further discussion occur on the relationship of the survivability of human microbial pathogens in untreated manure and the use of such material as a fertilizer, particularly on products that may be eaten with little or not further treatment.

3.2.1.7 Agricultural chemicals

Brazil

“Agricultural chemicals” (actual 3.2.1.7), last para. should included “...does not pose a risk of contaminating crops and the environment.”

Mexico

We suggest eliminating the text in brackets in point 3.2.1.7, third bullet and incorporating the text “ ... and the harvest date”.

United States of America

Section 3.2.1.7. In the first bullet, change “antibiotics” to “antimicrobials”.

3.2.1.8 Biological control

Brazil

Eliminate the brackets in 3.2.1.8 [Environmental], considering the importance of environmental contamination by agricultural chemicals and by biological control in primary production areas.

United States of America

Section 3.2.1.8. In the further revision of this Code, the United States recommends that the phrase “competing biologicals for microorganisms and/or their metabolites” should be further clarified as to the specific nature of these materials.

3.2.3 Personnel health, hygiene and sanitary facilities

United States of America

We recommend removal of the brackets around “or indirectly”.

3.2.3.1 Personnel hygiene and sanitary facilities**Denmark**

3.2.3.1 - 3.2.3.4 Some of the provisions in this part of the paper are more detailed than in section VII of the General Principles of Food Hygiene. For example it is mentioned that "long or painted fingernails should be covered". Denmark is of the opinion that the text in the General Principles of Food Hygiene as the main rule should be used, and deviations should only be made in circumstances where there is special hygienic problems relating to the commodity concerned.

Mexico

Given that the introductory phrase to the first bullet in point 3.2.3.1 repeats the previous paragraph, we suggest its removal. In the fourth bullet (3.2.3.1), we suggest substituting the word "en buenas" // "in good" // for "bajo" // "under" //.

United States of America

The statement in brackets "as far as possible" should be deleted. The four concepts listed in this section under personnel hygiene and sanitary facilities should not be considered as "optional" recommendations.

3.2.3.2 Health status**Mexico**

We suggest that points 3.2.3.2 to 3.2.3.4 be part of section 3.2.3.1.

3.2.3.4 Personal behaviour**Mexico**

We suggest changing the text of the second paragraph in point 3.2.3.4, resulting in the following "Personal effects such as jewelry, watches or other accessories should not be worn in fresh fruit and vegetable production areas. Long or polished fingernails are not permitted".

United States of America

Section 3.2.3.4 (and additional sections). To address the concern associated with the handling of cans, glass, plastic, by employees, and the potential for foreign object materials to enter the product from this source, the following additions to the document are recommended.

New 3rd paragraph: "Care should taken to prevent potential contamination of fresh fruit and vegetables with physical matter such as cans, glass, plastic, etc. Trash receptacles should be provided and employees encouraged to protect product from such contamination."

3.2.4 Equipment associated with growing and harvesting**Denmark**

Food contact materials should under normal and foreseeable conditions not transfer their constituents to foodstuffs in quantities which could endanger human health or bring about unacceptable change in the composition of the foodstuffs or a deterioration in the organoleptic characteristics thereof.

3.3.1 *Prevention of cross-contamination*

Brazil

4th. Bullet: Necessary emphasis to not use equipment and containers used for agricultural chemicals, as follows: “Equipment and containers previously used for potential hazardous material (e.g. garbage, manure), should not be used for holding fresh fruits...without adequate cleaning and disinfecting. Equipment and containers previously used for agricultural chemicals, should not be used.” Equally important, should be considered the transport vehicles as a possible source of agricultural chemical contamination of fruits and vegetables (last bullet in 3.3.2). Brazil considers that the verification of absence of agricultural chemical pose technical difficulties to be confirmed.

Mexico

In the introductory paragraph, (last sentence), point 3.3.1, we suggest substituting “...personnel...” for “their employees”.

United States of America

Last bullet. For clarity, reword this bullet as follows: “Damaged containers that can no longer be kept in a sanitary manner should be discarded.”

Add a bullet: “Trash receptacles should be provided to contain plastic, glass, cans, etc. that can be brought on site from harvest employees or found in the field during harvesting.”

3.3.2 *Storage and transport from the field to the packing facility*

United States of America

First bullet. For additional clarity as to the nature of this provision, add the following to the end of the bullet: “They should be constructed in a manner to reduce the opportunity for potential contamination from physical objects such as glass, wood, etc.” Additionally, to the 4th bullet, add the following words to the end of the bullet to ensure proper usage of cleaning materials and hazardous substances: “Cleaning materials and agricultural chemicals should be used according to manufacturer’s instructions for their intended purpose

3.4.1 *Cleaning programs*

United States of America

Second bullet. For clarity, add the following words to the end of the bullet: “...on a regular basis.”

3.4.2 *Cleaning procedures and methods*

Denmark

Bullet: Disinfection of equipment surfaces should be followed by rinsing with potable water.

5.2.1 Time and temperature control

United States of America

Second bullet point: The brackets around the reference to the Codex Committee on Food Additives and Contaminants should be removed. The reference to CCFAC is appropriate.

5.2.2.1 Post-harvest water use

Denmark

Second bullet: See introductory general remarks regarding disinfectants.

5.2.2.3 Cooling of fresh fruits and vegetables

Mexico

In point 5.2.2.3, third bullet, we suggest eliminating the first part of the paragraph, which says: "Forced-air cooling...in cold rooms."

5.2.2.4 Cold storage

Mexico

In point 5.2.2.4., we suggest changing the title of the section from "cold storage" to "Refrigerated storage".

5.7 DOCUMENTATION AND RECORDS

Mexico

In point 5.7, second bullet, we suggest substituting the text: "agua de procesamiento" //"processing water"// for "agua de proceso" //"processing water"//.

United States of America

First paragraph. Recognizing the different product types that are included in this Code, begin the second sentence with the following: "Depending on the preservation and use (e.g., canning, freezing, etc.), this..."

5.8 RECALL PROCEDURES

Mexico

We suggest the following text for the subtitle in point 5.8: "procedimientos de retiro de productos del mercado" // "Product recall procedures"//.

We suggest that (in Spanish version) the term "empacado" //"packing"// be changed to "envasado" //"packing"//.

United States of America

We suggest adding to the title of this section the term " and traceback".

10.2 TRAINING PROGRAMMES

Brazil

We suggest to replace the term “probability” for “possibility”, since probability should be considered as a numerical value.

United States of America

Add a last bullet, end of the document: “The importance of controlling potential physical hazards such as glass, cans and other trash.”

ANNEX

Proposed Annex for Sprout Production

2.1 SCOPE AND USE

Mexico

In 2.1, fourth sentence of the version in Spanish, the second phrase that mentions “General Principles of Food Hygiene” should be changed to “Codes of Practice for Primary Production”.

2.3 DEFINITIONS

Mexico

In the definition of “Seed producer”, we suggest changing the phrase: ”toda ...responsable de gestionar las actividades ... “ //”any... responsible for managing activities”// to “ toda ... responsable de la administración de las actividades...” //”any... responsible for managing activities”// .

3.2.1.2 Manure and biosolids

Mexico

We suggest modifying the text of the paragraph in brackets to the following: “utilizados durante la preparación del terreno y siembra” // “used during soil preparation and seeding”// and eliminating the brackets.

4.2.1 Design and layout

Mexico

We suggest that the subtitle ”Proyecto y disposiciones” //Design and facilities”// be changed to “Diseño y estructura” //”Design and Structure”//.

5.2.2.3 Seed disinfection

Denmark

Denmark questions the use of disinfectants, see introductory general remarks.

Poland

It should be also considered the possibility of using the irradiation of some seeds to reduce the number of pathogenic micro-organisms.

United States of America

A bullet point should be added which states “Disinfection materials should be used according to manufacturer’s instructions for their intended use.”

5.2.2.5 Pre-germination soak**Denmark**

Denmark questions the use of disinfectants, see introductory general remarks.

Mexico

we suggest including the word ”potable” in the second bullet, with the resultant text reading: “Seeds should be soaked in potable water for the shortest time as possible in order to minimize microbial growth”.

5.2.3.1 Testing of seed lots before entering production**United States of America**

In the first sentence of this paragraph, change the word "are" to the word "is".

5.3.1 *Specifications for incoming seeds***Brazil**

“When necessary, the storage must be done under temperature and humidity (moisture) control”.
“Storage control program should be conduct under FIFO principles”.

5.3.2 *Control of incoming seeds***Mexico**

In point 5.3.2, we suggest the following:

In the introductory text, the elimination of the word “obvious”.

In the second billet, we suggest eliminating the first part. The text would then begin with “If the bag is damaged...”.

In the second billet, the elimination of the word “important”.

10. TRAINING**United States of America**

We note that there is nothing following the words “In addition”. This sentence(s) should be completed or deleted.